Remarks

In the present paper, Claims 1-12 are pending. Claims 1, 8, 11 and 12 have been amended.

Support for the amendments to the claims can be found, for example, at paragraphs 5, 11, 25 and 33 of the applicants' corresponding published patent application U.S. Pat. Pub. No. 2005/0066277.

Statement With Regard to Claim Amendments Herein

The claim amendments herein are made for purposes of advancing prosecution in the instant application. The applicants strongly believe that the claims, as originally filed, define over the cited prior art. However, in the spirit of advancing prosecution in the instant application without undue delay in the duration of prosecution that would otherwise be required by the appeal process, the claims have been amended herein to clarify the definition of "saturation" and to clarity that saturation is used to implement highlighting in a tree map visualization. Accordingly, the applicants reserve the right to pursue additional claims, including the claims as originally filed, in a continuation application.

35 U.S.C. § 102(e)

Claims 1-12 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,583,794 to Wattenberg et al. (hereinafter the '794 patent).

According to the M.P.E.P. §2131, to establish a *prima facie* case of anticipation, the prior art reference must teach or suggest all the claim limitations. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." It is the applicants' position that the art does not support the rejections to the claims as amended herein, thus a *prima facie* case of anticipation has not been established. Accordingly, the applicants respectfully request that the rejections are withdrawn.

Claim 1:

It is the applicants' position that the '794 patent does not teach or suggest, as recited in claim 1, and as amended herein:

…indicating a location of select bounding boxes corresponding to the identified data elements in the data set to be highlighted so as to provide a third characteristic that does not change the color of the select bounding boxes;

wherein the location of the select bounding boxes is indicated by displaying the select bounding boxes as having a greater color saturation in comparison to the saturation of the remainder of the bounding boxes, even if a non-selected bounding box may otherwise have the same color as a corresponding selected bounding box so as to preserve the display of the first, second and third characteristics in the tree map visualization corresponding to the identified data elements.

In the '794 patent, a tree map visualization graphically conveys information about the underlying data through the use of region size and color. The primary disclosed application is to visualize financial information, such as by providing a market map display. However, the specific use of the tree map visualization is not relevant to this analysis.

The '794 patent discloses a "Find" feature that is provided in the legend display, that allows a user to type a name and have the corresponding data "highlighted"[1]. While the general concept of highlighting is alluded to, there is no teaching or suggestion that the highlighting is performed by displaying the select bounding boxes as having a greater color *saturation* in comparison to the saturation of the remainder of the bounding boxes, even if a non-selected bounding box may otherwise have the same color as a corresponding selected bounding box so as to preserve the display of first, second and third characteristics in the tree map visualization corresponding to the identified data elements.

The '794 patent uses the terms "shade" and "intensity" as a way to further differentiate color in the display. This is necessary in the '794 patent because as disclosed, only two basic colors are used for all of the boxes, such as red and green or yellow and blue, e.g., to indicate a

[1] See for example, the '794 patent, Col. 3, lines 16-29.

positive or negative price change from the previous market day or from its 12-month low, etc. [2] As such, the '794 patent relies on a basic color, e.g., red to mean declining stock price and various shades or intensities of red to indicate various degrees of stock loss. Similarly, the '794 patent relies on a basic color, e.g., green to mean increasing stock value and various shades or intensities of green to represent different degrees of stock value increase. In addition, black may optionally be used to indicate a neutral or no change condition. However, these shades or intensities are expressly used to represent different data values corresponding underlying elements in a tree map visualization. That is, the shade or intensity in combination with the box size define the display and have nothing to do with the manner in which select boxes are highlighted.

Saturation is "how dull or vibrant" the color is. At one extreme, a color appears to be grayish and works its way up into a vibrant version of the color as saturation level increases. It is thus the applicants' position that the selection of a particular shade or intensity of a given color to represent a data value corresponding to an element in a tree map visualization as disclosed in the '794 patent neither teaches nor suggests generating a tree map visualization …comprising a plurality of bounding boxes, each bounding box having a size corresponding to a first characteristic of a data set and a color corresponding to a second characteristic of the data set and indicating a location of select bounding boxes corresponding to the identified data elements in the data set to be highlighted so as to provide a third characteristic that does not change the color of the select bounding boxes …by displaying the select bounding boxes as having a greater color saturation in comparison to the saturation of the remainder of the bounding boxes, even if a non-selected bounding box may otherwise have the same color as a corresponding selected bounding box so as to preserve the display of the first, second and third characteristics in the tree map visualization corresponding to the identified data elements.

[2] See for example, the '794 patent, Col. 3, lines 33-60; Col. 9, line 63 through Col. 10 line 20; Col. 17, lines 5-12.

The '794 patent is completely silent as to any specific implementations of performing highlighting operations of bounding boxes corresponding to identified data elements in a tree map visualization. Moreover, the '794 patent is completely silent as to the use of color *saturation* to highlight bounding boxes. Still further, the use of saturation to perform highlighting is not inherent in the disclosure as there are a significant number of ways to highlight without adjusting the saturation of a color. Moreover, there is no teaching or suggestion anywhere in the '794 patent that discloses indicating a location of select bounding boxes to provide a third characteristic that does not change the color of the selected bounding boxes.

With specific reference to claim 2, there is no teaching or suggestion in the '794 patent to highlight by increasing the color saturation of identified elements to be highlighted. Again, the applicants believe that the cited use of color shade to represent specific values or changes to values in the underlying data do not teach or suggest the use of color saturation for highlighting as claimed. As noted above, the '794 patent ties the shade of a color to its underlying value. Thus, two bounding blocks with the same underlying value will always have the same shade of color. There is no teaching or suggestion in the '794 patent that would allow two boxes with the same underlying value to have a color in two difference saturations, thus highlighting one from the other. Thus, the '794 patent does not teach or suggest increasing color *saturation* to identify data elements to be highlighted.

With specific reference to claim 3, there is no teaching or suggestion in the '794 patent Similarly, there is no teaching or suggestion in the '794 patent of generating a tree map visualization by *decreasing color saturation* of bounding boxes of elements that are *not identified*. For example, nowhere does the '794 patent disclose highlighting a box of interest by de-emphasizing the surrounding boxes by decreasing the color saturation of those surrounding boxes.

In view of the amendments and clarifying comments herein, the applicants respectfully request that the Examiner withdraw the rejection to claim 1 and the claims that depend therefrom under 35 U.S.C. §102(e).

Claims 11 and 12 have been amended herein to recite elements that are similar to that discussed in greater detail herein with reference to claim 1. Thus, the above arguments are applicable by analogy. In view of the amendments and clarifying comments herein, the applicants respectfully request that the Examiner withdraw the rejection to claims 11 and 12 under 35 U.S.C. §102(e).

Claim 8:

It is the applicants' position that the '794 patent does not teach or suggest, as recited in claim 8, and as amended herein:

…a plurality of bounding boxes, each bounding box having a size corresponding to a first characteristic of a data set and a color corresponding to a second characteristic of the data set; and

…at least one bounding box having a color saturation greater than a color saturation of another of the plurality of bounding boxes that has the same color as the at least one bounding box so as to highlight the at least one bounding box so as to provide a third characteristic of the data set and to preserve the display of the first, second and third characteristics in the tree map visualization corresponding to the at least one bounding box.

As noted above in the Remarks with reference to Claim 1, the '794 patent does not teach the use or color saturation for highlighting. Moreover, no technique is taught or suggested in the '794 patent that would provide highlighting in a manner that preserves first and second characteristics of the identified data while also providing a third characteristic.

In the '794 patent, if two bounding boxes have the same color, they have the same underlying data value. As an example, in the '794 patent, if you change the shade of a bounding box, you are also suggesting a change in the value of the underlying data, rather than highlighting the bounding box, e.g., to distinguish the bounding box as a bounding box of interest. Thus, two bounding boxes having the same color also share the same underlying data

values. There is no disclosure of two bounding boxes in the '794 patent, having the same color and different saturation, e.g., to implement a highlight.

In view of the amendments and clarifying comments herein, the applicants respectfully request that the Examiner withdraw the rejection to claim 8 and the claims that depend therefrom under 35 U.S.C. §102(e).

Conclusion

For all of the above reasons, the applicants respectfully submit that the above claims recite allowable subject matter. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,
Stevens & Showalter, L.L.P.

By /Thomas E. Lees/

Thomas E. Lees 46,867

7019 Corporate Way
Dayton, Ohio 45459-4238
Phone 937-438-6848
tlees@sspatlaw.com

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